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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,868	11/15/2001	Michael Belman	P05378US0	4795

22885 7590 11/14/2003

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DES MOINES, IA 50309-2721

EXAMINER

SEFER, AHMED N

ART UNIT PAPER NUMBER

2826

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,868

Applicant(s)

BELMAN, MICHAEL

Examiner

A. Sefer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/15/03 has been entered and claim 8 has been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. USPN 5,084,694 in view of Edwards, JR. et al. USPN 5,929,746.

Kikuchi et al disclose in fig. 1 a chip resistor comprising a substrate 1 having opposite parallel symmetrical top and bottom surfaces, and a central longitudinal plane of symmetry; separate and spaced first and second resistive layers 2 or thin film resistive layers (as in claim 3) on the top and bottom surfaces, respectively, electrically connected in parallel to each other and the top and the bottom surfaces of the substrate being symmetrically located with respect to and equidistant from the central longitudinal plane so that when electrical current

passes through the resistive layers, a temperature distribution within the substrate will be substantially symmetrical about the central longitudinal plane of the substrate for eliminating thermal bending thereof; wherein an area of the first resistive layer is substantially equal to that of the second resistive layer such that the chip resistor with both resistive layers tolerates higher instantaneous pulsed power than either layer could provide separately and individually; and first and second terminals 1C/3 for surface mounting, each terminal being electrically connected to the first and second resistive layers, the terminals being symmetrical about a central longitudinal plane, but do not specifically disclose a direct loading to a pick-and-place machine without concern for top-bottom orientation.

Edwards, JR. et al disclose (see col. 1, lines 9-21 and col. 5, lines 21-38) a direct loading to a pick-and-place machine.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teachings of Edwards, JR. et al with the device of Kikuchi et al since that would accommodate surface mounted resistors with a minimum adjustment of the machine as taught by Edwards, JR. et al.

As for claim 2, Edwards, JR. et al disclose (see col. 4, lines 1-5) thick film resistors.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al in view of Edwards, JR. et al as applied to claim 1 above, and further in view of Thompson USPN 4,064,477.

The combined references disclose the device structure as recited in claim 1, but do not specifically teach the use of foil resistive layers.

Thompson discloses (see col. 1, lines 5-26) a foil resistive layer.

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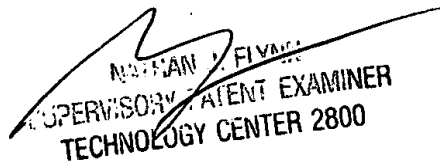
Therefore, it would have been obvious to one skilled in the art at the time the invention was made to substitute the thin or thick film resistive layer of the prior art with a foil resistive layer, since that would allow a uniform current density.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601.

ANS

October 7, 2003


NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800